

What is claimed is:

1. A printing apparatus comprising:
a carry roller for carrying a print sheet;
5 wherein
said carry roller has virtual circumference segments that
are obtained by virtually dividing a circumference of the carry
roller into a plurality of segments in a direction in which the
carry roller is rotated, and
10 said printing apparatus is capable of
printing a plurality of patterns for each of said
virtual circumference segments, each of said patterns
corresponding to a different correction amount, and
setting a correction amount corresponding to one of
15 the patterns to each said virtual circumference segment.
2. A printing apparatus according to claim 1, wherein
said printing apparatus is capable of forming the pattern
for determining a correction amount for a predetermined virtual
20 circumference segment by printing a predetermined structural
pattern before and after the print sheet is carried by that virtual
circumference segment of said carry roller.
3. A printing apparatus according to claim 1, wherein
25 the patterns, which correspond to the correction amounts
for each of the virtual circumference segments, are arranged in
a row in a carry direction of the print sheet for each of the virtual
circumference segments; and
the pattern rows, which are arranged in rows, are printed
30 on a single print sheet in a direction that is perpendicular to

said carry direction.

4. A printing apparatus according to claim 2, wherein
the plurality of patterns for each of said virtual
5 circumference segments corresponding to one correction amount are
formed starting from a front end side of the print sheet in order
of formation of the patterns.

5. A printing apparatus according to claim 1, wherein said
10 printing apparatus is capable of
forming a pattern group by forming patterns for each of said
virtual circumference segments corresponding to one correction
amount, and
changing said correction amount each time said carry roller
15 makes a full turn and forming said pattern group made of patterns
corresponding to the correction amount that has been changed.

6. A printing apparatus according to claim 5, further
comprising
20 a print head for printing while performing scanning in a
direction that is perpendicular to a carry direction of said print
sheet;

wherein

as for two adjacent patterns that make up one of said pattern
25 groups, a structural pattern printed before carrying in one
pattern and a structural pattern printed after carrying in another
pattern are printed during the same scan of the print head.

7. A printing apparatus according to claim 6, wherein
30 said print head has a plurality of nozzles that are arranged

in the carry direction of said print sheet and that are capable of ejecting ink,

said patterns are formed using some of said nozzles, and nozzles forming the structural pattern printed after said carrying by a particular virtual circumference segment are located more toward the front end of the print sheet than nozzles forming the structural pattern printed before said carrying.

8. A printing apparatus according to claim 1, wherein a length of each said pattern in said carry direction is shorter than a product of an amount the print sheet is carried and a number into which said carry roller is virtually divided.

9. A printing apparatus according to claim 2, wherein said structural pattern is made of a plurality of lines spaced at an equal spacing in a carry direction of the print sheet, or dot rows arranged in a direction that is perpendicular to said carry direction, and

a correction amount corresponding to the pattern in which said lines or said dot rows of the structural pattern that is printed after carrying are formed at a position that evenly divides a space between said lines or said dot rows of the structural pattern that is printed before carrying said print sheet is set.

10. A printing apparatus according to claim 2, wherein said structural pattern is made of a plurality of lines spaced at an equal spacing in a carry direction of the print sheet, or dot rows arranged in a direction that is perpendicular to said carry direction, and

a correction amount corresponding to the pattern in which

said lines or said dot rows of the structural pattern that is printed after carrying are formed at a position that overlaps said lines or said dot rows of the structural pattern that is printed before carrying said print sheet is set.

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11. A printing apparatus comprising:

a carry roller for carrying a print sheet;

wherein

said carry roller has virtual circumference segments that
10 are obtained by virtually dividing a circumference of the carry roller into a plurality of segments in a direction in which the carry roller is rotated,

said printing apparatus is capable of

printing a plurality of patterns for each of said
15 virtual circumference segments, each of said patterns corresponding to a different correction amount,

setting a correction amount corresponding to one of the patterns to each said virtual circumference segment,

printing a predetermined structural pattern before
20 and after the print sheet is carried by a predetermined virtual circumference segment of said carry roller, and

forming a pattern for determining a correction amount for that virtual circumference segment,

the patterns, which correspond to the correction amounts
25 for each of the virtual circumference segments, are arranged in a row in a carry direction of the print sheet for each of the virtual circumference segments,

the pattern rows, which are arranged in rows, are printed
on a single print sheet arranged in a direction that is
30 perpendicular to said carry direction,

the plurality of patterns for each of said virtual circumference segments corresponding to one correction amount are formed starting from a front end side of the print sheet in order of formation of the patterns,

5 said printing apparatus is capable of

 forming a pattern group by forming patterns for each of said virtual circumference segments corresponding to one correction amount, and

 changing said correction amount each time said carry
10 roller makes a full turn and forming said pattern group made of patterns corresponding to the correction amount that has been changed,

 said printing apparatus further comprises a print head for printing while performing scanning in a direction that is
15 perpendicular to a carry direction of said print sheet,

 as for two adjacent patterns that make up one of said pattern groups, a structural pattern printed before carrying in one pattern and a structural pattern printed after carrying in another pattern are printed during the same scan of the print head,

20 said print head has a plurality of nozzles that are arranged in the carry direction of said print sheet and that are capable of ejecting ink,

 said patterns are formed using some of said nozzles,

 nozzles forming the structural pattern printed after said
25 carrying by a particular virtual circumference segment are located more toward the front end of the print sheet than nozzles forming the structural pattern printed before said carrying,

 a length of each said pattern in said carry direction is shorter than a product of an amount the print sheet is carried
30 and a number into which said carry roller is virtually divided,

said structural pattern is made of a plurality of lines spaced at an equal spacing in a carry direction of the print sheet, or dot rows arranged in a direction that is perpendicular to said carry direction, and

5 a correction amount corresponding to the pattern in which said lines or said dot rows of the structural pattern that is printed after carrying are formed at a position that evenly divides a space between said lines or said dot rows of the structural pattern that is printed before carrying said print sheet is set.

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12. A carry amount correction pattern comprising:

 a plurality of pattern, each said pattern corresponding to a different correction amount;

 wherein

15 the carry amount correction pattern has said plurality of patterns for each virtual circumference segment obtained by virtually dividing a circumference of a carry roller for carrying a print sheet into a plurality of segments in a direction in which the carry roller is rotated.

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13. A storage medium having a program recorded thereon, comprising:

 a memory for storing the program;

25 wherein said program is capable of making a printing apparatus that has a carry roller for carrying a print sheet:

 print a plurality of patterns for each of a plurality of virtual circumference segments, each of said patterns corresponding to a different correction amount, and each of said virtual circumference segments being obtained by
30 virtually dividing a circumference of said carry roller into

a plurality of segments in a direction in which the carry roller is rotated, and

set a correction amount corresponding to one of the patterns to each said virtual circumference segment.

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14. A computer system comprising:

a computer main unit; and

a printing apparatus that has a carry roller for carrying a print sheet and that is capable of being connected to said

10 computer main unit;

wherein

said carry roller has virtual circumference segments that are obtained by virtually dividing a circumference of the carry roller into a plurality of segments in a direction in which the

15 carry roller is rotated, and

said printing apparatus is capable of

printing a plurality of patterns for each of said virtual circumference segments, each of said patterns corresponding to a different correction amount, and

20 setting a correction amount corresponding to one of the patterns to each said virtual circumference segment.

15. A printing method comprising:

printing a plurality of patterns for each of a plurality of virtual circumference segments, each of said patterns corresponding to a different correction amount, and each of said virtual circumference segments being obtained by virtually dividing a circumference of a carry roller into a plurality of segments in a direction in which the carry roller is rotated, and

30 setting a correction amount corresponding to one of the

patterns to each said virtual circumference segment.